# STATE OF MISSOURI

# DEPARTMENT OF NATURAL RESOURCES

# MISSOURI CLEAN WATER COMMISSION



# MISSOURI STATE OPERATING PERMIT

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500,  $92^{nd}$  Congress) as amended,

Village of Hartsburg c/o Carl Thomas

MO-0108995

Permit No.

Owner:

Address:	P.O. Box 24, Hartsburg, MO 65039						
Continuing Authority: Address:	Boone County Regional Sewer District (BCSD) 1314 N. 7 <sup>th</sup> St., Columbia, MO 65201-3902						
Facility Name: Facility Address:	BCSD, Hartsburg Wastewater Treatment Facility Hartsburg, MO 65039						
Legal Description: Latitude/Longitude:	SE½, SW¼, Sec. 8, T45N, R12W, Boone County +3841226/-09218168						
Receiving Stream: First Classified Stream and ID: USGS Basin & Sub-watershed No.:	Unnamed tributary to Slate Creek (U) Missouri River (P) (00701) 303(d) (10300102-130004)						
s authorized to discharge from the facility as set forth herein:	described herein, in accordance with the effluent limitations and monitoring requirements						
FACILITY DESCRIPTION  Outfall #001 - POTW - SIC #4952  Aerated lagoon/sludge is retained in lagoon Design population equivalent 144. Design flow 14,400 gallons per day.  Actual flow 6,540 gallons per day. Design sludge production 2.2 dry tons/year							
•	charges under the Missouri Clean Water Law and the National Pollutant Discharge her regulated areas. This permit may be appealed in accordance with Section 644.051.6 of						
August 11, 2006 Effective Date	Doyle Childers, Director, Department of Natural Resources Executive Secretary, Clean Water Commission						
August 10, 2011 Expiration Date	G. Irene Crawford, Director, Northeast Regional Office						
20 700 0041 (10 02)	G. Helle Clawfold, Diffector, Northeast Regional Office						

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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PERMIT NUMBER MO-0108995

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The interim effluent limitations shall become effective upon issuance and remain in effect until four (4) years and 364-days from the issuance of this permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	INTERIM EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	once/month	24hr. estimate
Biochemical Oxygen Demand <sub>5</sub> **	mg/L		65	45	once/month	grab
Total Suspended Solids**	mg/L		120	80	once/month	grab
pH – Units	SU	***		***	once/month	grab
Ammonia as N	mg/L	*		*	once/month	grab
Fecal Coliform (Note 1)	#/100ml	*		*	once/month	grab
Temperature	°C	*		*	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED <u>MONTHLY</u>; THE FIRST REPORT IS DUE <u>October 28, 2006</u>. THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I, II, & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u>, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* This facility is required to meet a removal efficiency of 65% or more.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.

Note 1 – Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.

# A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

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PERMIT NUMBER MO-0108995

The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective one (1) day before the date of expiration of this permit and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:

OUTFALL NUMBER AND	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
EFFLUENT PARAMETER(S)		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
Outfall #001						
Flow	MGD	*		*	once/month	24hr. estimate
Biochemical Oxygen Demand <sub>5</sub> **	mg/L		65	45	once/month	grab
Total Suspended Solids**	mg/L		120	80	once/month	grab
pH – Units	SU	***		***	once/month	grab
Ammonia as N	mg/L	*		*	once/month	grab
Fecal Coliform (Note 1)	#/100ml	1000		400	once/month	grab
Temperature	°C	*		*	once/month	grab

MONITORING REPORTS SHALL BE SUBMITTED  $\underline{MONTHLY}$ ; THE FIRST REPORT IS DUE  $\underline{October~28, 2011}$ . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.

#### **B. STANDARD CONDITIONS**

IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED Parts I, II, & III STANDARD CONDITIONS DATED October 1, 1980 and August 15, 1994, AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.

MO 780-0010 (8/91)

#### A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (continued)

- \* Monitoring requirement only.
- \*\* This facility is required to meet a removal efficiency of 65% or more.
- \*\*\* pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.

Note 1 – Final limitations and monitoring requirements for Fecal Coliform are applicable only during the recreational season from April 1 through October 31.

#### C. SPECIAL CONDITIONS

- 1. This permit may be reopened and modified, or alternatively revoked and reissued, to:
  - (a) Comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2), and 307(a) (2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:
    - (1) contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
    - (2) controls any pollutant not limited in the permit.
  - (b) Incorporate new or modified effluent limitations or other conditions, if the result of a waste load allocation study, toxicity test or other information indicates changes are necessary to assure compliance with Missouri's Water Quality Standards.
  - (c) Incorporate new or modified effluent limitations or other conditions if, as the result of a watershed analysis, a Total Maximum Daily Load (TMDL) limitation is developed for the receiving waters which are currently included in Missouri's list of waters of the state not fully achieving the state's water quality standards, also called the 303(d) list.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Clean Water Act then applicable.

- 2. All outfalls must be clearly marked in the field.
- 3. Permittee will cease discharge by connection to area-wide wastewater treatment system within 90 days of notice of its availability.
- 4. Changes in Discharges of Toxic Substances

The permittee shall notify the Director as soon as it knows or has reason to believe:

- (a) That any activity has occurred or will occur which would result in the discharge of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
  - (1) One hundred micrograms per liter (100 μg/L);
  - (2) Two hundred micrograms per liter (200  $\mu$ g/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu$ g/L) for 2,5 dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
  - (3) Five (5) times the maximum concentration value reported for the pollutant in the permit application;
  - (4) The level established in Part A of the permit by the Director.
- (b) That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant, which was not reported in the permit application.
- 5. Report as no-discharge when a discharge does not occur during the report period.

#### 6. Water Quality Standards

- (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
- (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
  - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
  - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses:
  - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
  - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
  - (5) There shall be no significant human health hazard from incidental contact with the water;
  - (6) There shall be no acute toxicity to livestock or wildlife watering;
  - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
  - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

# C. SPECIAL CONDITIONS (continued)

- 7. Sludge and Biosolids Use For Domestic Wastewater Treatment Facilities
  - (a) Permittee shall comply with the pollutant limitations, monitoring, reporting, and other requirements in accordance with the attached permit Standard Conditions.
  - (b) If sludge is not removed by a contract hauler, Permittee is authorized to land apply biosolids that are removed from the domestic wastewater treatment lagoon during lagoon clean-out and maintenance activities. Permit Standard Conditions, Part III shall apply to the land application of biosolids. Permittee shall notify the department at least 180 days prior to the planned removal of biosolids from the lagoon. The department may require submittal of a biosolids management plan for department review and approval as determined appropriate on a case-by-case basis.

### D. SCHEDULE OF COMPLIANCE

- 1. The final daily maximum and monthly average Fecal Coliform limits of 400/100ml and 1000/100ml, respectively, shall become effective one day prior to the expiration date of the permit or December 31, 2013, whichever comes first unless items (b) or (c) below are approved by the Department. The Effluent Regulation, 10 CSR 20 7.015(9)(H), allows the permittee up to five years from the issuance date of this permit to:
  - (a) Install disinfection facilities, or;
  - (b) Present an evaluation to show that disinfection is not required to protect one or both recreational uses, or;
  - (c) Present a Use Attainability Analysis (UAA) that demonstrates one or both designated recreational uses are not attainable in the classified waters receiving the effluent.
- 2. If chlorination is the chosen method of disinfection, a Total Residual Chlorine limit will be added to the permit.

Date of Fact Sheet: May 22, 2006

Date of Public Notice: June 30, 2006

# NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FACT SHEET

This Fact Sheet explains the applicable regulations, rationale for development of this permit and the public participation process.

NPDES PERMIT NUMBER: MO-0108995

FACILITY NAME: Hartsburg WWTF/ Boone County Regional Sewer District

OWNER NAME: City of Hartsburg

LOCATION: SE1/4, SW1/4, Sec. 8, T45N, R12W, Boone County

RECEIVING STREAM: Missouri River (P) (00701) 303(d)

FACILITY CONTACT PERSON: Dewayne Cooksey TELEPHONE: (573) 441-0098

# FACILITY DESCRIPTION POTW/Subdivision - SIC #4952

Outfall #001

Aerated lagoon/sludge is retained in lagoon.

Design population equivalent 144.

Design flow 14,400 gallons per day.

Actual flow 6,540 gallons per day.

Design sludge production 2.2 dry tons/year.

The Federal Water Pollution Control Act ("Clean Water Act" Section 402 Public Law 92-500 as amended) established the National Pollutant Discharge Elimination System (NPDES) permit program. This program regulates the discharge of pollutants from point sources into the waters of the United States, and the release of storm water from certain point sources. All such discharges are unlawful without a permit (Section 301 of the "Clean Water Act"). After a permit is obtained, a discharge not in compliance with all permit terms and conditions is unlawful. Permits in Missouri are issued by the Director of the Department of Natural Resources under an approved program, operating in accordance with federal and state laws (Federal "Clean Water Act" and "Missouri Clean Water Law" Section 644 as amended).

10 CSR 20-7.031 Missouri Water Quality Standards, Missouri Department of Natural Resources (the Department) "defines the Clean Water Commission water quality objectives in terms of water uses to be maintained and the criteria to protect those uses." The receiving stream's beneficial water uses to be maintained are livestock and wildlife watering, whole body contact recreation, secondary contact recreation, drinking water supply, industrial and protection of aquatic life.

To protect these beneficial uses and the water quality of the receiving stream, effluent limitations are being established under federal and state laws.

# EFFLUENT LIMIT DERIVATION & RATIONALE

Permit limits have been retained from the previous permit. A Water Quality Review Sheet was therefore not developed. Monitoring requirements have been added for ammonia, temperature, and Fecal Coliform. Monitoring for ammonia is added due to the adoption of the U. S. Environmental Protection Agency's "1999 Update of Ambient Water Quality Criteria for Ammonia". Fecal Coliform monitoring has been added on a five year schedule of compliance due to the Missouri River between the Chariton River and the Gasconade river being on the B list for Whole Body Contact streams. A Use Attainability Analysis (UAA) was conducted on July 13, 2005, but it was inconclusive and the Whole Body Contact designation was retained.

This permit will be issued for a period of five years.